# Environmental Context of Forestry, Salmon, and CZARA in Oregon

- Oregon's forestry program has not addressed key significant deficiencies over the last 15 years. According to state and federal studies, the problems 1) have caused and continue to cause temperature and sediment impairments and 2) continue to threaten ESA-listed coastal coho.
- There are over 6800 river miles in Oregon's coastal zone area impaired for temperature and sediment. Forestry makes up ~80% of the stream network in western Oregon and is a major contributor to temperature and sediment problems.
- The data from the ODF/DEQ 2002 sufficiency analysis and ODF's Ripstream studies (2002 2010) indicate that Oregon's forest practice rules contribute to water quality impairments. The 1995 Tri-State Botkin Report, the 1999 Oregon-Commissioned Independent Multidisciplinary Science Team, and NOAA's Coastal Coho Listing (2008) concluded that current Oregon FPA practices will not restore listed coastal coho populations. Insufficient riparian buffers, roads, and landslides in forestry are primary factors harming salmon.
- Washington and California have adopted forestry rules that address these problems; Oregon has not. Oregon's forestry program remains largely the same as the one in 1998.

Comparing Oregon, Washington and California General Forest Practices

Table 1. General Forestry Practices on State and Private Lands in Oregon, Washington, and California			
	Oregon	Washington	California
Riparian Buffers			
Small and	20-foot no cut;	50-foot minimum no	50-150 foot management
Medium Fish-	regulatory	cut; regulatory	area; regulatory
Bearing			
Non-Fish	None	50-foot no cut;	Variable buffer width
Bearing("Type N")		regulatory	determined by consulting
			forester; regulatory
Herbicide Spray Buffers Non-Fish Bearing ("Type N")			
Non-Fish Bearing	None	50-foot, no spray;	Variable buffer width by
("Type N")		regulatory	consulting forester for
			riparian buffer; regulatory
Roads Management			
Road Types	New, Existing;	New, Existing,	New, Existing, Legacy;
	voluntary program,	Legacy; regulatory	regulatory
	no monitoring,		
	tracking and		
	enforcement		
Landslides and Water Quality			
Resources	Public safety;	Public safety,	Public safety,
Protected	regulatory	land and water	Land and water resources;
		resources;	regulatory
		regulatory	

## Additional Progress Needed

• **General CZARA Guidelines for Approval**: Two ways for states to have an approvable program: 1) regulatory program; **OR** 2) voluntary approach with program description, monitoring, tracking, and an enforceable authority to back up program.

### Reasonable Options for Oregon to Get to an Approvable CZARA Program

- Riparian Buffers
  - Medium and Small-Fish Bearing Streams: regulatory program
    - Deficiencies: Small no-cut buffer for small and medium fish-bearing streams.
      Creates temperature, erosion and sediment problems.
    - Examples of State Actions Needed: 1) Complete riparian rule by end of 2015 or mid-2016; 2) Rule should cover a broad range of medium and small-fish bearing streams; and 3) Range 80-100' no-cut buffers.
  - Small, Non-fish bearing streams: voluntary approach
    - Deficiencies: No buffers for non-fish bearing streams. Creates temperature, erosion and sediment problems for salmon spawning areas and downstream habitat.
    - Examples of State Actions Needed: 1) Range 50-100' buffers; 2) Monitoring, tracking, and reporting similar to other ODF programs for other tree harvests; and 3) Explore ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented
- Roads: voluntary approach
  - Deficiencies: Does not include legacy roads. Voluntary program doesn't include monitoring and tracking.
  - Examples of State Actions Needed: 1) Use voluntary approach to include legacy roads in road inventory; 2) Develop identification approach for universe of roads, including legacy roads having potential to deliver sediment to streams, 3) Develop ranking and inventory system, 4) Conduct evaluation, problem identification process and schedule for repairing problem roads, 5) Monitor and track voluntary measures. Examples could include those similar to WA's and IDs); 6) Explore ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented
- Landslides: voluntary approach
  - Examples of State Actions Needed: 1) Measures to protect landslide areas (numerous examples in attachment); 2) Voluntary programs to encourage forestry BMPs to protect high-risk landslide areas and ensure that roads are designed to minimize slope failure risk; 3) Monitor and track voluntary measures. Examples could include those similar to WA's and IDs); 4) Explore ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented
- Spray Buffers for Aerial Application of Herbicides on Non-Fish Bearing Streams: voluntary approach
  - o Deficiencies: No spray buffer
  - <u>Examples of State Actions Needed:</u> 1) Adequate <u>riparian</u> protections for non-fish bearing streams may also be sufficient for <u>herbicide</u> spray buffers; OR 1) Revise ODF Notification of Operation form to add a check box for aerial applicators to adhere to FIFRA labels for

ED 454-000331371

all stream types; 2) Guidelines for voluntary buffer protections for aerial application of herbicides on non-fish bearing streams; 3) Monitor and track voluntary measures using existing pesticide regulations; 4) Explore ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented

**Note:** EPA and NOAA are still evaluating Oregon's agricultural program in the context of CZARA and public comments. Concerns include lack of specificity in Ag Water Quality Management Action Plan rules, no formal monitoring and tracking, and limited enforcement.

# Environmental Context of Forestry, Salmon, and CZARA in Oregon

- Oregon's forestry program has not addressed key significant deficiencies over the last 15 years. According to state and federal studies, the problems 1) have caused and continues to cause temperature and sediment impairments and 2) continue to threaten ESA-listed coastal coho.
- There are over 6800 river miles in Oregon's coastal zone area impaired for temperature and sediment. Forestry makes up ~80% of the stream network in western Oregon and is a major contributor to temperature and sediment problems.
- The-data from the ODF/DEQ 2002 sufficiency analysis and ODF's Ripstream studies (2002 2010) indicate that Oregon's forest practice rules contribute to water quality impairments. The 1995 Tri-State Botkin Report, the 1999 Oregon-Commissioned Independent Multidisciplinary Science Team, the ODF/DEQ 2002 Sufficiency Analysis, ODF's Ripstream Studies (2002 - 2010), and NOAA's Coastal Coho Listing (2008) concluded that current Oregon FPA practices will not restore listed coastal coho populations. Insufficient riparian buffers, roads, and landslides in forestry are primary factors harming salmon.
- Washington and California have adopted forestry rules that address these problems; Oregon has not. Oregon's forestry program remains largely the same as the one in 1998.

Comparing Oregon, Washington and California General Forest Practices

Table 1. General Forestry Practices on State and Private Lands in Oregon, Washington, and California Oregon Washington California Riparian Buffers Small and 20-foot no cut; 50-foot minimum no 50-150 foot management Medium Fishregulatory cut; regulatory area; regulatory **Bearing** Non-Fish 50-foot no cut; Variable buffer width None Bearing("Type N") regulatory determined by consulting forester; regulatory Herbicide Spray Buffers Non-Fish Bearing ("Type N") Non-Fish Bearing Variable buffer width by None 50-foot, no spray; ("Type N") regulatory consulting forester for riparian buffer; regulatory Roads Management Road Types New, Existing; New, Existing, New, Existing, Legacy; voluntary program, Legacy; regulatory regulatory no monitoring, tracking and enforcement Landslides and Water Quality Public safety, Public safety. Resources Public safety; Protected regulatory land and water Land and water resources; resources; regulatory regulatory

Comment [JL1]: The ODF studies did not conclude anything about salmon restoration, so I suggest this change.

Comment [JL2]: There have been some important improvements regarding roads since 1998.

Comment [JL3]: There are plenty of road rules that are mandatory. The Oregon Plan

measures to inventory and upgrade roads are voluntary though and lack tracking/enforcement.

ED 454-000331371 EPA-6822 013952

### Additional Progress Needed

• **General CZARA Guidelines for Approval**: Two ways for states to have an approvable program: 1) *regulatory program*; **OR** 2) *voluntary approach* with program description, monitoring, tracking, and an enforceable authority to back up program.

#### Reasonable Options for Oregon to Get to an Approvable CZARA Program

- Riparian Buffers
  - o Medium and Small-Fish Bearing Streams: regulatory program
    - Deficiencies: Small no-cut buffer for small and medium fish-bearing streams.
      Creates temperature, erosion and sediment, and runoff problems.
    - <u>Examples of State Actions Needed</u>: 1) Complete riparian rule by end of 2015 or mid-2016; 2) Rule should cover a broad range of medium and small-fish bearing streams; and 3) Range 80-100' no-cut buffers.
  - Small, Non-fish bearing streams: voluntary approach
    - Deficiencies: No buffers for non-fish bearing streams. Creates temperature, <u>erosion and</u>-sediment, and runoff problems for salmon spawning areas and downstream habitat
    - <u>Examples of State Actions Needed</u>: 1) Range 50-100' buffers; 2) Monitoring, tracking, and reporting similar to other ODF programs for other tree harvests; and 3) Explore ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented
- · Roads: voluntary approach
  - Deficiencies: Does not include legacy roads. Voluntary program doesn't include monitoring and tracking.
  - Examples of State Actions Needed: 1) Use voluntary approach to include legacy roads in road inventory; 2) Develop identification approach for universe of roads, including legacy roads having potential to deliver sediment to streams, 3) Develop ranking and inventory system, 4) Conduct evaluation, problem identification process and schedule for repairing problem roads, 5) Monitor and track voluntary measures. Examples could include those similar to WA's and IDs); 6) Explore ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented
- Landslides: voluntary approach
  - <u>Examples of State Actions Needed</u>: 1) Measures to protect landslide areas (numerous examples in attachment); 2) Voluntary programs to encourage forestry BMPs to protect high-risk landslide areas and ensure that roads are designed to minimize slope failure risk; 3) Monitor and track voluntary measures. Examples could include those similar to WA's and IDs); 4) Explore ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented
- Spray Buffers for Aerial Application of Herbicides on Non-Fish Bearing Streams: voluntary approach
  - Deficiencies: No spray buffer
  - <u>Examples of State Actions Needed:</u> 1) Adequate <u>riparian</u> protections for non-fish bearing streams may also be sufficient for <u>herbicide</u> spray buffers; OR 1) Revise ODF Notification of Operation form to add a check box for aerial applicators to adhere to FIFRA labels for

**Comment [JL4]:** I suppose we have to say this under CZARA but it seems like status quo

ED 454-000331371 EPA-6822 013953

all stream types; 2) Guidelines for voluntary buffer protections for aerial application of herbicides on non-fish bearing streams; 3) Monitor and track voluntary measures using existing pesticide regulations; 4) Explore ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented

Comment [JL5]: Same comment

**Note:** EPA and NOAA are still evaluating Oregon's agricultural program in the context of CZARA and public comments. Concerns include lack of specificity in Ag Water Quality Management Action Plan rules, no formal monitoring and tracking, and limited enforcement.